

IN THE CLAIMS

1. (Currently amended) A transceiver for transmitting signals in a transmitting mode and for receiving signals in a receiving mode and comprising a single digital synthesizer driven phase locked loop, wherein said digital synthesizer driven phase locked loop, in said transmitting mode, is in a modulating state, with said digital synthesizer driven phase locked loop, in said receiving mode, being in an oscillating state and receiving a non-modulation signal ~~including at least one of a dc voltage and a ground voltage, wherein~~ said digital synthesizer driven phase locked loop comprises, in said modulating state, a first filtering performance, with said digital synthesizer driven phase locked loop comprising, in said oscillating state, a second filtering performance different from said first filtering performance.

2. (Canceled)

3. (Currently amended) The transceiver according to claim 12, wherein said transceiver comprises a controller for generating said modulation signal and for generating control signals, with a switch being coupled to said controller and said digital synthesizer driven phase locked loop for in response to a first control signal supplying said modulation signal from said controller to said digital synthesizer driven phase locked loop and in response to a second control signal supplying said non-modulation signal to said digital synthesizer driven phase locked loop.

4. (Canceled)

5. (Currently amended) A transceiver for transmitting signals in a transmitting mode and for receiving signals in a receiving mode and comprising a single digital synthesizer driven phase locked loop, wherein said digital synthesizer driven phase locked loop, in said transmitting mode, is in a modulating state, with said digital synthesizer driven phase locked loop, in said receiving mode, being in an oscillating state;

wherein said single digital synthesizer driven phase locked loop comprises a first filter and a second filter, with a switch being coupled to said first filter and said second filter for in response to a first control signal selecting said first filter and in response to a second control signal selecting said second filter.

6. (Previously presented) The transceiver according to claim 1, wherein said digital synthesizer driven phase locked loop, in said modulating state, generates a modulated signal, with said digital synthesizer driven phase locked loop, in said oscillating state, generating said non-modulated signal.

7. (Previously presented) The transceiver according to claim 6, wherein an output of said digital synthesizer driven phase locked loop is coupled via a first switch and a transmitter part and a second switch to an antenna for in response to a first control signal supplying said modulated signal to said antenna for transmitting said modulated signal, with said first switch further being coupled to a first input of a demodulator and with said second switch further being coupled via a receiver part to a second input of said demodulator for in response to a second control signal supplying said non-modulated signal to said

demodulator for demodulating a radio signal received via said antenna.

8. (Previously presented) A single digital synthesizer driven phase locked loop for use in a transceiver for transmitting signals in a transmitting mode and for receiving signals in a receiving mode and comprising said single digital synthesizer driven phase locked loop, wherein said single digital synthesizer driven phase locked loop, in said transmitting mode, is in a modulating state, with said single digital synthesizer driven phase locked loop, in said receiving mode, being in an oscillating state, and wherein said single digital synthesizer driven phase locked loop comprises a first filter and a second filter, with a switch being coupled to said first filter and said second filter for in response to a first control signal selecting said first filter and in response to a second control signal selecting said second filter.

9. (Previously presented) A phase locked loop for use in a single digital synthesizer driven phase locked loop for use in a transceiver for transmitting signals in a transmitting mode and for receiving signals in a receiving mode and comprising said digital synthesizer driven phase locked loop, wherein said phase locked loop, in said transmitting mode, is in a modulating state, with said phase locked loop, in said receiving mode, being in an oscillating state, and wherein said single digital synthesizer driven phase locked loop comprises a first filter and a second filter, with a switch being coupled to said first filter and said second filter for in response to a first control signal selecting said first filter and in response to a second control signal selecting said second filter.

10. (Previously presented) A digital synthesizer for use in a single digital synthesizer driven phase locked loop for use in a transceiver for transmitting signals in a transmitting mode and for receiving signals in a receiving mode and comprising said digital synthesizer driven phase locked loop, wherein said digital synthesizer, in said transmitting mode, is in a modulating state, with said digital synthesizer, in said receiving mode, being in an oscillating state, and wherein said single digital synthesizer driven phase locked loop comprises a first filter and a second filter, with a switch being coupled to said first filter and said second filter for in response to a first control signal selecting said first filter and in response to a second control signal selecting said second filter.

11. (Previously presented) A system comprising at least one portable unit and at least one network unit for radio communication, with at least one unit comprising at least one transceiver for transmitting signals in a transmitting mode and for receiving signals in a receiving mode and comprising a single digital synthesizer driven phase locked loop, wherein said digital synthesizer driven phase locked loop, in said transmitting mode, is in a modulating state, with said digital synthesizer driven phase locked loop, in said receiving mode, being in an oscillating state, and wherein said single digital synthesizer driven phase locked loop comprises a first filter and a second filter, with a switch being coupled to said first filter and said second filter for in response to a first control signal selecting said first filter and in response to a second control signal selecting said second filter.

12. (Previously presented) A portable unit comprising a transceiver for transmitting

signals in a transmitting mode and for receiving signals in a receiving mode and comprising a single digital synthesizer driven phase locked loop, wherein said digital synthesizer driven phase locked loop, in said transmitting mode, is in a modulating state, with said digital synthesizer driven phase locked loop, in said receiving mode, being in an oscillating state, and wherein said single digital synthesizer driven phase locked loop comprises a first filter and a second filter, with a switch being coupled to said first filter and said second filter for in response to a first control signal selecting said first filter and in response to a second control signal selecting said second filter.

13. (Previously presented) A network unit comprising at least one transceiver for transmitting signals in a transmitting mode and for receiving signals in a receiving mode and comprising a single digital synthesizer driven phase locked loop, wherein said digital synthesizer driven phase locked loop, in said transmitting mode, is in a modulating state, with said digital synthesizer driven phase locked loop, in said receiving mode, being in an oscillating state, and wherein said single digital synthesizer driven phase locked loop comprises a first filter and a second filter, with a switch being coupled to said first filter and said second filter for in response to a first control signal selecting said first filter and in response to a second control signal selecting said second filter.

14. (Currently amended) A method for transmitting signals in a transmitting mode and for receiving signals in a receiving mode via a single digital synthesizer driven phase locked loop, wherein said method comprises the acts of:

bringing said digital synthesizer driven phase locked loop, in said transmitting mode, in a modulating state, and a

in said receiving mode, bringing said digital synthesizer driven phase locked loop in an oscillating state, and wherein said single digital synthesizer driven phase locked loop comprises a first filter and a second filter, with a switch being coupled to said first filter and said second filter for in response to a first control signal selecting said first filter and in response to a second control signal selecting said second filter.

15. (Previously presented) The transceiver of claim 1, further comprising a mode detector configured to detect said transmitting mode and said receiving mode by making a calculation using a first predetermined time slot used for transmission and a second predetermined time slot used for reception.

16. (Previously presented) The single digital synthesizer driven phase locked loop of claim 8, wherein said single digital synthesizer driven phase locked loop, in said oscillating state, is configured to receive at least one of a dc-voltage and a ground voltage.

17. (Previously presented) The phase locked loop of claim 9, wherein said single digital synthesizer driven phase locked loop, in said oscillating state, is configured to receive at least one of a dc-voltage and a ground voltage.

18. (Previously presented) The system of claim 11, wherein said single digital synthesizer driven phase locked loop, in said oscillating state, is configured to receive at least one of a dc-voltage and a ground voltage.

19. (Previously presented) The portable unit of claim 12, wherein said single digital synthesizer driven phase locked loop, in said oscillating state, is configured to receive at least one of a dc-voltage and a ground voltage.

20. (Previously presented) The network unit of claim 13, wherein said single digital synthesizer driven phase locked loop, in said oscillating state, is configured to receive at least one of a dc-voltage and a ground voltage.